

Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Biosolids Treatment Works Information

Treatment works name: Dovetail Energy, LLC		
Ohio NPDES permit #: 1IN00305		County: Greene
Mailing address: 1146 Herr Rd		
City: Fairborn	State: OH	Zip: 45324
Operator of record: Taylor Faecher		
Telephone number: (419) 253-5300		
Email address: info@renergy.com		

Certification Statement

1. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.
2. I have read and understand Chapter 3745-40 of the Ohio Administrative Code (OAC) and I agree to beneficially use biosolids in accordance with all applicable beneficial use requirements and restrictions established in Chapter 3745-40 of the Ohio Administrative Code.
3. I agree to only beneficially use biosolids that have satisfied a pathogen reduction alternative and a vector attraction reduction option and have metals concentration below the pollutant ceiling concentrations as established in Chapter 3745-40 of the Ohio Administrative Code.
4. I agree to maintain all applicable records established in Chapter 3745-40 of the Ohio Administrative Code.


Signature

8 / 17 / 12
Date

This form shall be signed by the operator of record for the treatment works, be an original signature, not a copy, and must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Owner Consent for Beneficial Use

Exemption 6

Certification Statement

1. I agree to allow biosolids generated by the treatment plant identified on Form BUA-1 to be beneficially used on my property at agronomic rates.
2. I agree to allow federal, state and local regulatory staff access to the beneficial use site for the purposes of inspecting and authorizing the beneficial use site, beneficially using biosolids, and collecting and analyzing samples from the beneficial use site. I reserve the right to ask the above parties for proper identification at any time.
3. I certify that I am holder of legal title to the property described on application form BUA-5, or am authorized by the holder to give consent for the land application of biosolids, and that there are no restrictions to the granting of consent under this form.

Exemption 6

9 / 21 / 17
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

¹ For purposes of this form, "beneficial use site owner" means the person who owns the legal rights to the proposed beneficial use site.

² In the event the owner of the beneficial use site changes, Form BUA-2 must be revised and resubmitted to Ohio EPA.

Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Beneficial Use Site Operator Consent for Beneficial Use

Exemption 6

Certification Statement

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.

Exemption 6

9, 21, 17
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

¹ For purposes of this form, "beneficial use site operator" means the person who plants, grows, harvests or otherwise manages feed crops, fiber crops, food crops or pasture land on the proposed beneficial use site.

² In the event the operator of the beneficial use site changes, Form BUA-3 must be revised and resubmitted to Ohio EPA.

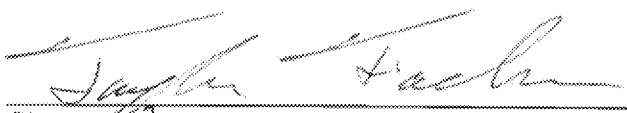
Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Beneficial User Information

Beneficial user ¹ : Dovetail Energy, LLC		
Contact person: Taylor Faecher		
Mailing address: 461 State Route 61		
City: Marengo	State: OH	Zip: 43334
Telephone number: (419) 253-5300		
Email address: info@renergy.com		

Certification Statement

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.


Signature²

8/17/17
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

¹ For purposes of this form, the beneficial user means the person who sprays or spreads Class B biosolids onto the surface of the beneficial use site, injects below the surface of the beneficial use site, or incorporates into the soil of the beneficial use site, for the purpose of providing an agronomic benefit.

² In the event the beneficial user of the beneficial use site changes, Form BUA-4 must be revised and resubmitted to Ohio EPA.

Division of Surface Water
Application for Authorization: Class B Beneficial Use Sites

Beneficial Use Site Information

Ohio EPA Site I.D. (Ohio EPA Use Only)

Field site I.D.: GRS-15-01																															
Beneficial use site location: Off Stevenson Rd, North of Brush Rd																															
County: Greene		Township:																													
Latitude: 39.7321		Longitude: -83.90447																													
Total acreage proposed for beneficial use: 45																															
Type of beneficial use to be performed: Surface application <input type="checkbox"/> Injection or immediate incorporation <input checked="" type="checkbox"/>		Ground slope percent: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Less than 15%</td> <td style="width: 20px; text-align: center;"><input checked="" type="checkbox"/></td> <td style="padding: 2px;">15% to 19.9%</td> <td style="width: 20px; text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Greater than 20%</td> <td style="text-align: center;"><input type="checkbox"/></td> <td colspan="2"></td> </tr> </table>		Less than 15%	<input checked="" type="checkbox"/>	15% to 19.9%	<input type="checkbox"/>	Greater than 20%	<input type="checkbox"/>																						
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Soil pH (s.u): 19		Soil phosphorus (mg/kg): _____ Bray Kurtz P1 <input type="checkbox"/> Mehlich 3 <input checked="" type="checkbox"/>																													
Bedrock depth (feet): 5																															
Type of crops to be grown: <table border="1" style="float: right; margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px;">Crop Type</th> <th style="padding: 2px;">Expected Yield</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Corn</td> <td style="padding: 2px;">1 8 0</td> </tr> <tr> <td style="padding: 2px;">Soybeans</td> <td style="padding: 2px;">5 5</td> </tr> <tr> <td style="padding: 2px;">Wheat</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Pasture</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Hay</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Other:</td> <td style="padding: 2px;"></td> </tr> </tbody> </table>				Crop Type	Expected Yield	Corn	1 8 0	Soybeans	5 5	Wheat		Pasture		Hay		Other:															
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Applicable isolation distances:

Type of Isolation Distance			
Surface waters of the state	<input checked="" type="checkbox"/>	Sinkhole/UIC class V drainage	<input type="checkbox"/>
Occupied building	<input checked="" type="checkbox"/>	Private potable water source	<input type="checkbox"/>
Medical care facility	<input type="checkbox"/>		

Are any endangered species or endangered species habitats located on the beneficial use site?

☐ Yes ☒ No

If "Yes" is marked, list the types of endangered species or endangered species habitat:

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Have biosolids been beneficially used on the site since July 20, 1993?

☐ Yes ☒ No

If "Yes" is marked, list the biosolids generators and years beneficial use occurred:

Generator	NPDES permit No.	Year of Beneficial Use

The application must also include all of the following:

- ☐ A soil map of the proposed beneficial use site;
- ☐ A frequency flood class map of the proposed beneficial use site;
- ☐ An aerial map of the proposed beneficial use site that clearly identifies the entrance of the beneficial use site from the nearest road and all applicable isolation distances as established in Chapter 3745-40 of the Ohio Administrative Code;
- ☐ A vicinity road map at or near the township level that clearly identifies the proposed beneficial use site with all roads labeled; and
- ☐ A copy of the most recent soil test results identified in this form.



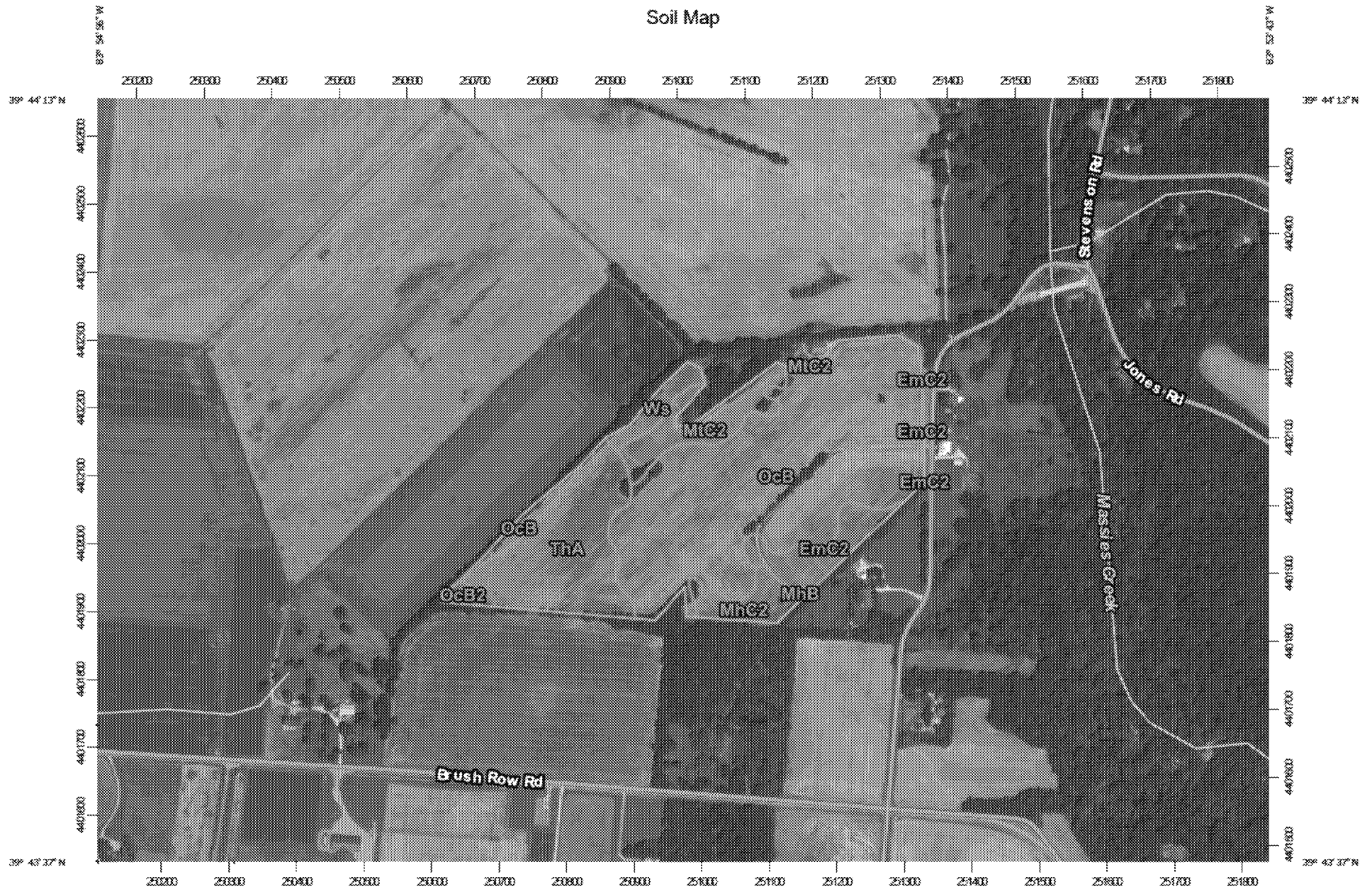
GRS-15-01 Setback Distance



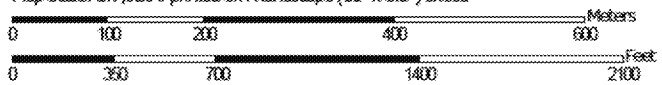
0 0.075 0.15 0.3 Miles

Setback Distance	
GRS-15-01	
Total Area: 44.65 acres	
Setbacks:	
Residence - 300' Buffer	6.16 acres
Residence - 100' Buffer	0.22 acres
Surface Waters - 33' Buffer	0.08 acres
Total Setback Area:	
	6.46 acres

Soil Map



Map Scale: 1:7,920 if printed on A landscape (11" x 8.5") sheet.

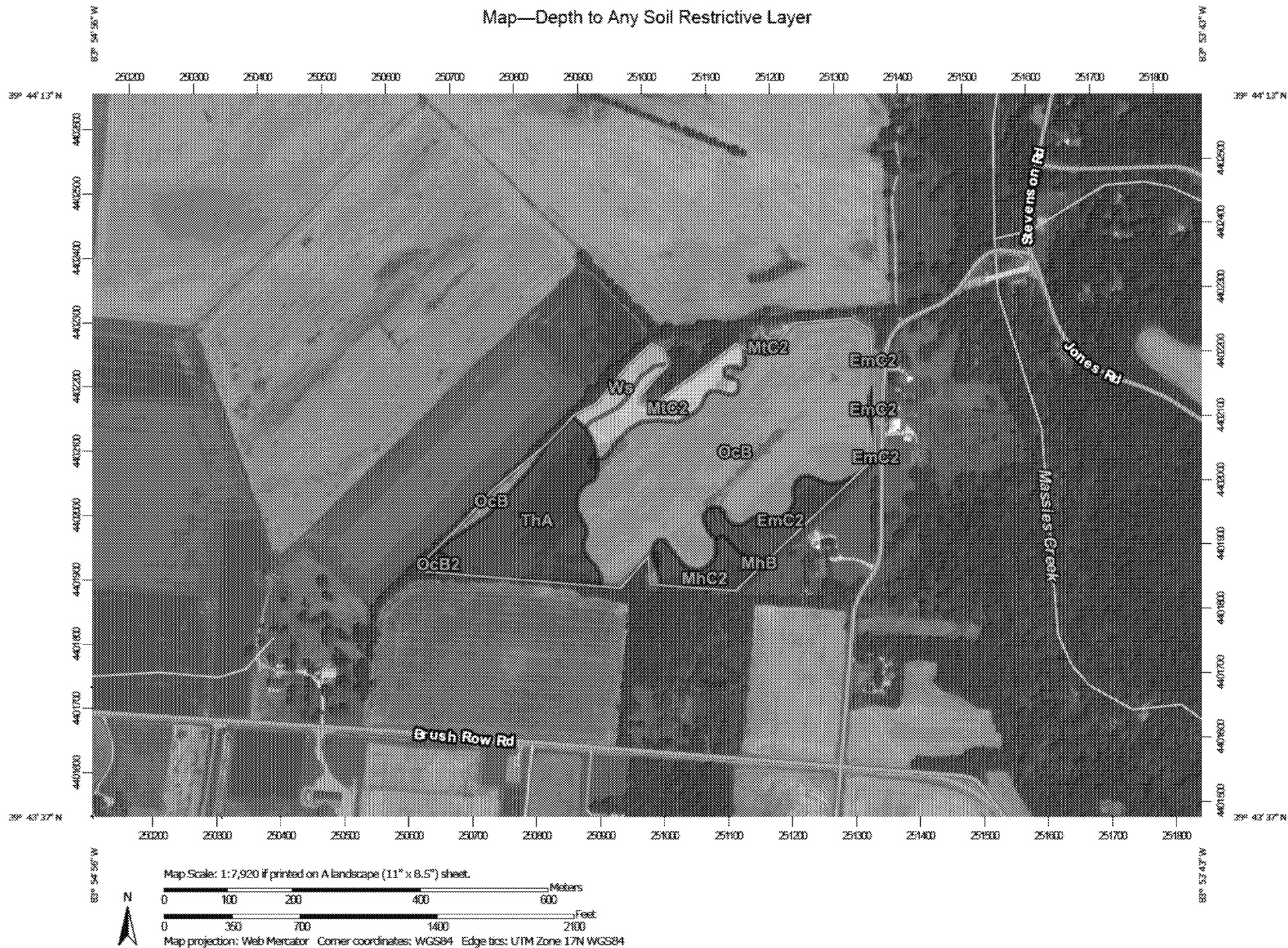


Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

Map Unit Legend

Greene County, Ohio (OH057)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EmC2	Eldean silt loam, 6 to 12 percent slopes, moderately eroded	2.8	6.2%
MhB	Miamian silt loam, 2 to 6 percent slopes	0.1	0.1%
MhC2	Miamian silt loam, 6 to 12 percent slopes, moderately eroded	1.9	4.3%
MtC2	Milton silt loam, 6 to 12 percent slopes, moderately eroded	3.3	7.3%
OcB	Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	26.5	59.4%
OcB2	Ockley silt loam, 2 to 6 percent slopes, moderately eroded	0.3	0.7%
ThA	Thackery silt loam, 0 to 2 percent slopes	8.6	19.2%
Ws	Westland silty clay loam, Southern Ohio Till Plain, 0 to 2 percent slopes	1.2	2.7%
Totals for Area of Interest		44.6	100.0%

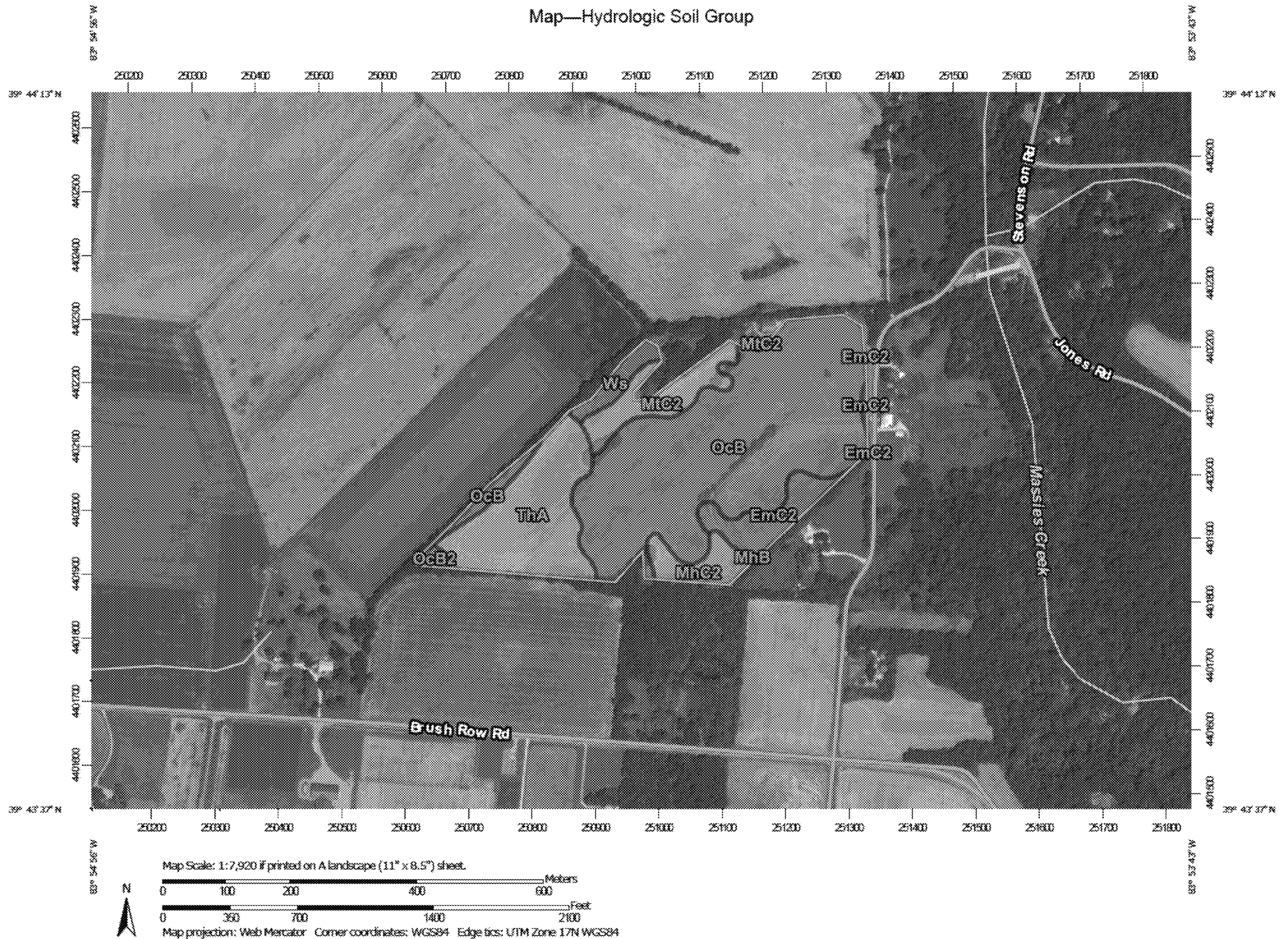
Map—Depth to Any Soil Restrictive Layer



Table—Depth to Any Soil Restrictive Layer

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Greene County, Ohio (OH057)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
EmC2	Eldean silt loam, 6 to 12 percent slopes, moderately eroded	>200	2.8	6.2%
MhB	Miamian silt loam, 2 to 6 percent slopes	91	0.1	0.1%
MhC2	Miamian silt loam, 6 to 12 percent slopes, moderately eroded	>200	1.9	4.3%
MtC2	Milton silt loam, 6 to 12 percent slopes, moderately eroded	76	3.3	7.3%
OcB	Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	168	26.5	59.4%
OcB2	Ockley silt loam, 2 to 6 percent slopes, moderately eroded	>200	0.3	0.7%
ThA	Thackery silt loam, 0 to 2 percent slopes	>200	8.6	19.2%
Ws	Westland silty clay loam, Southern Ohio Till Plain, 0 to 2 percent slopes	119	1.2	2.7%
Totals for Area of Interest			44.6	100.0%

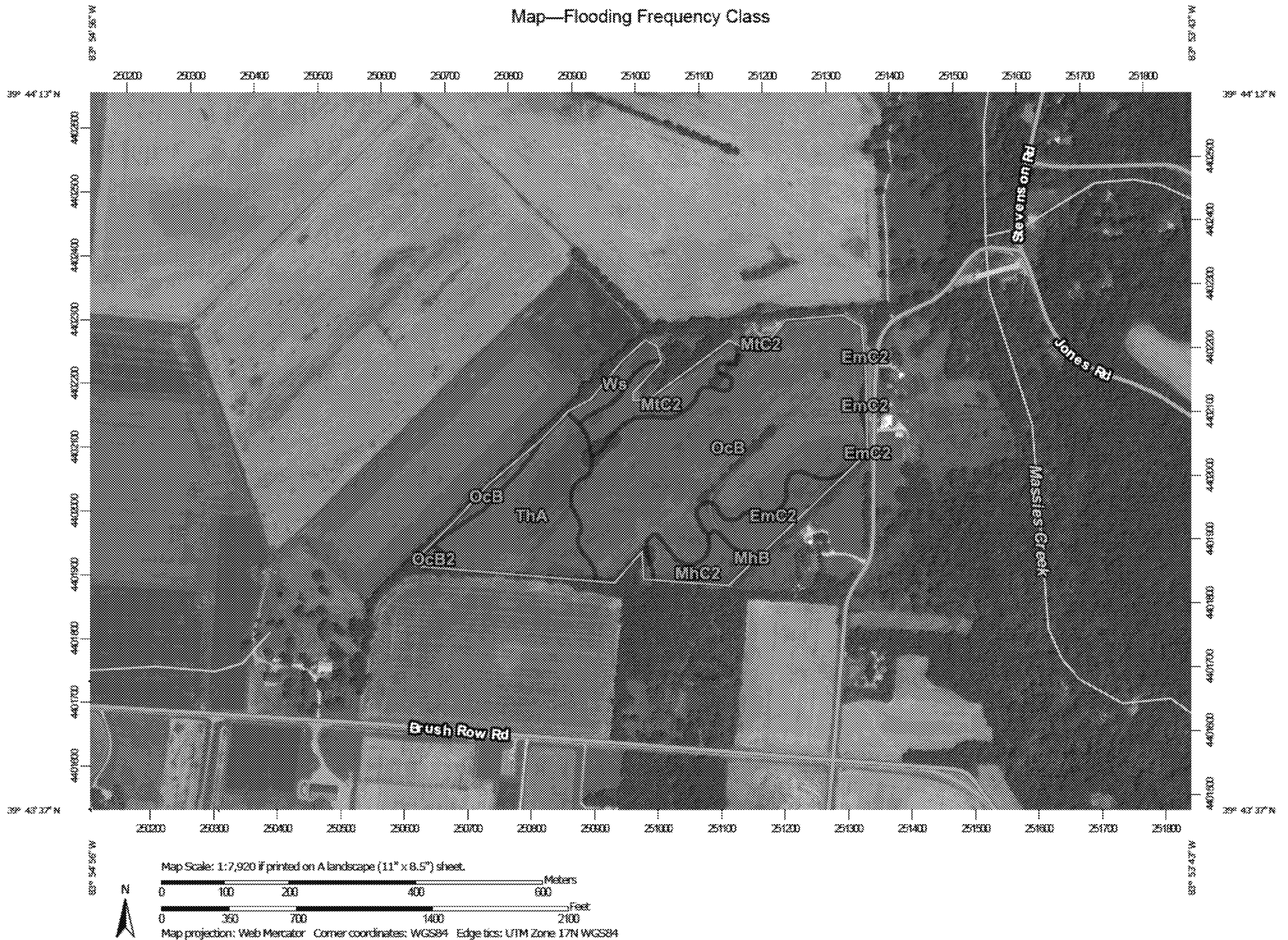
Map—Hydrologic Soil Group



Table—Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Greene County, Ohio (OH057)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EmC2	Eldean silt loam, 6 to 12 percent slopes, moderately eroded	B	2.8	6.2%
MhB	Miamian silt loam, 2 to 6 percent slopes	C	0.1	0.1%
MhC2	Miamian silt loam, 6 to 12 percent slopes, moderately eroded	C	1.9	4.3%
MtC2	Milton silt loam, 6 to 12 percent slopes, moderately eroded	C	3.3	7.3%
OcB	Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	B	26.5	59.4%
OcB2	Ockley silt loam, 2 to 6 percent slopes, moderately eroded	B	0.3	0.7%
ThA	Thackery silt loam, 0 to 2 percent slopes	C	8.6	19.2%
Ws	Westland silty clay loam, Southern Ohio Till Plain, 0 to 2 percent slopes	B/D	1.2	2.7%
Totals for Area of Interest			44.6	100.0%

Map—Flooding Frequency Class



Table—Flooding Frequency Class

Flooding Frequency Class— Summary by Map Unit — Greene County, Ohio (OH057)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EmC2	Eldean silt loam, 6 to 12 percent slopes, moderately eroded	None	2.8	6.2%
MhB	Miamian silt loam, 2 to 6 percent slopes	None	0.1	0.1%
MhC2	Miamian silt loam, 6 to 12 percent slopes, moderately eroded	None	1.9	4.3%
MtC2	Milton silt loam, 6 to 12 percent slopes, moderately eroded	None	3.3	7.3%
OcB	Ockley silt loam, Southern Ohio Till Plain, 2 to 6 percent slopes	None	26.5	59.4%
OcB2	Ockley silt loam, 2 to 6 percent slopes, moderately eroded	None	0.3	0.7%
ThA	Thackery silt loam, 0 to 2 percent slopes	None	8.6	19.2%
Ws	Westland silty clay loam, Southern Ohio Till Plain, 0 to 2 percent slopes	None	1.2	2.7%
Totals for Area of Interest			44.6	100.0%

lb/A

BROOKSIDE LABORATORIES, INC. ⁷⁴¹⁵⁵⁻¹⁸

SOIL AUDIT AND INVENTORY REPORT

Name Dovetail Bio Energy City Fairborn State OH
 Independent Consultant Brookside Consultants of Ohio, Inc. Date 09/26/2017

Sample Location <u>MALONEY</u>		TOP	DRIVE			
Sample Identification						
Lab Number		0118-1	0119-1			
Total Exchange Capacity (ME/100 g)		18.45	9.32			
pH (H ₂ O 1:1)		7.2	6.0			
Organic Matter (360°C LOI) %		3.30	2.05			
Estimated Nitrogen Release lb/A		83	61			
ANIONS	SOLUBLE SULFUR* ppm	9	9			
	MEHLICH III lb/A P as P ₂ O ₅	41	87			
	ppm of P	9	19			
	BRAY II lb/A P as P ₂ O ₅	69	64			
	ppm of P	15	14			
EXCHANGEABLE CATIONS	OLSEN lb/A P as P ₂ O ₅					
	ppm of P					
	CALCIUM* lb/A	4644	2508			
	ppm	2322	1254			
	MAGNESIUM* lb/A	1374	226			
	ppm	687	113			
	POTASSIUM* lb/A	196	102			
	ppm	98	51			
	SODIUM* lb/A	42	36			
	ppm	21	18			
BASE SATURATION PERCENT						
Calcium %		62.93	67.27			
Magnesium %		31.03	10.10			
Potassium %		1.36	1.40			
Sodium %		0.49	0.84			
Other Bases %		4.20	5.40			
Hydrogen %		0.00	15.00			
EXTRACTABLE MINORS						
Boron* (ppm)		0.62	0.33			
Iron* (ppm)		141	155			
Manganese* (ppm)		140	164			
Copper* (ppm)		2.78	1.19			
Zinc* (ppm)		3.21	2.04			
Aluminum* (ppm)		732	672			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

* Mehlich III Extractable

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